

IN THE CLAIMS:

1. (Currently Amended) A protective package for a catheter, comprising:

a protective sheath including a lumen sized to removably protect a catheter before use, the sheath having a length corresponding to a length of a catheter to be received therein and an inner diameter slightly greater than an outer diameter of a catheter to be received therein, a first end of the sheath being adapted to receive a distal end of a catheter to be received therein and a second end of the sheath being adapted to receive a proximal end of a catheter to be received therein; and

a hydration port located ~~configured to receive a fluid delivery device into the~~ lumen between the first and second ends of the sheath so that a desired proportion of a flushing fluid may be introduced into the lumen near a middle of the sheath and so that a desired proportion of flow thereinto is directed toward the first and second ends of the sheath with a first flow stream extending from the hydration port ~~opening~~ to the distal end of the catheter and a second flow stream extending from the hydration port ~~opening~~ to the proximal end of the catheter, wherein the hydration port includes an adapter for connection with a source of the flushing fluid.

2. (Previously Presented) The protective package according to claim 1, wherein the sheath is formed as a hoop.
3. (Previously Presented) The protective package according to claim 1, further comprising a protective assembly disposed at the first end of the sheath, the protective assembly being adapted to maintain a desired shape of the distal end of the catheter.
4. (Previously Presented) A protective package for a catheter, comprising:

a protective sheath including a lumen sized to removably protect a catheter before use, the sheath having a length corresponding to a length of a catheter to be received therein and an inner diameter slightly greater than an outer diameter of a catheter to be received therein, a first end of the sheath being adapted to receive a distal end of a catheter to be received therein and a second end of the sheath being adapted to receive a proximal end of a catheter to be received therein;

a hydration opening into the lumen between the first and second ends of the sheath so that a desired proportion of a flushing fluid may be introduced into the lumen near a middle of the sheath and so that a desired proportion of flow thereinto is directed toward the first and second ends of the sheath with a first flow stream extending from the hydration opening to the distal end of the catheter and a second flow stream extending from the hydration opening to the proximal end of the catheter; and

a luer attached to the sheath in fluid contact with the lumen, the luer defining the hydration opening.

5. (Canceled)
6. (Previously Presented) The protective package according to claim 3, wherein the protective assembly is adapted to prevent damage to a curvature of the distal end of the catheter.
7. (Cancelled).
8. (Cancelled).
9. (Currently Amended) The protective package according to claim 1, wherein the hydration port opening is adapted to divide a flow of the fluid thereinto to achieve a

desired ratio of fluid flow at the first end to fluid flow at the second end.

10. (Previously Presented) The protective package according to claim 9, wherein the desired ratio is one to one.
11. (Currently Amended) The protective package according to claim 1, wherein the hydration port opening is substantially equidistant from the first and second ends.
12. (Currently Amended) The protective package according to claim 1, wherein the hydration port opening is oriented to direct an amount of flow toward the first end, and wherein which is different than an amount of flow is directed toward the second end.
13. (Currently Amended) The protective package according to claim 12, wherein the hydration port opening is positioned so that, the amounts of flow toward the first and second ends achieves a desired ratio of fluid flow at the first end to fluid flow at the second end.
14. (Previously Presented) The protective package according to claim 13, wherein the desired ratio is one to one.
15. (Currently Amended) A catheter kit comprising:

a catheter having a distal end and a proximal end; and

a catheter packaging comprising:

a tubular enclosure removably protecting the catheter before use,
the tubular enclosure having a length corresponding to a length of the
catheter and an inner diameter defining a lumen that is slightly greater

than an outer diameter of the catheter, a first end of the tubular enclosure being adapted to receive the distal end and a second end of the tubular enclosure being adapted to receive the proximal end of the catheter; and

a hydration port ~~configured to receive a fluid delivery device and~~ extending into the lumen between the first and second ends of the tubular enclosure, the hydration port being positioned so that a desired proportion of flow of a flushing fluid that may be introduced into the lumen enters the lumen near a middle of the enclosure and is directed toward the first and second ends of the enclosure such that a first flow stream extends from the hydration port opening to the distal end of the catheter and a second flow stream extends from the hydration port opening to the proximal end of the catheter, wherein the hydration port includes an adapter for connection with a source of the flushing fluid.

16. (Previously Presented) The catheter kit according to claim 15, further comprising a protective structure disposed at the first end, the protective structure maintaining a desired curvature of a shaped distal tip of the catheter.
17. (Previously Presented) The catheter kit according to claim 15, wherein the tubular enclosure is coiled to form a hoop.
18. (Currently Amended) The catheter kit according to claim 15, wherein a hydrating fluid introduced into the tubular enclosure via the hydration port opening is divided such that the proximal end and the distal end of the catheter are substantially equally hydrated.
19. (Previously Presented) The catheter kit according to claim 15, wherein the catheter is a micro-catheter with a shaped distal tip.

20. (Currently Amended) The catheter kit according to claim 15, wherein the hydration port opening is substantially equidistant between the first and second ends.

21. (Currently Amended) A protective package for removably receiving an elongated medical device, comprising:

a protective sheath including a lumen sized to tightly fit the elongated medical device to be removably received therein to protect the elongated device before use, the sheath having a length corresponding to a length of the medical device and an inner diameter slightly greater than an outer diameter of the elongated device, a first end of the sheath being adapted to receive a distal end of the elongated medical device and a second end of the sheath being adapted to receive a proximal end of the elongated medical device; and

a hydration port located ~~configured to receive a fluid delivery device into the lumen~~ near a middle of the sheath so that a desired proportion of a flushing fluid that may be supplied to the sheath via the hydration port opening is directed toward the first and second ends of the sheath with a first flow stream extending from the hydration port opening to the distal end of the elongated device and a second flow stream extending from the hydration port opening to the proximal end of the elongated device, wherein the hydration port includes an adapter for connection with a source of the flushing fluid.

22. (Previously Presented) The protective package according to claim 21, wherein a portion of the lumen for receiving a distal end of the elongated medical device is curved in a manner complimenting a preformed curve of the distal end of the medical device.

23. (Previously Presented) The protective package according to claim 21, wherein a first portion of the lumen for receiving a distal end of the elongated medical device has a first diameter different than a second diameter of a second portion of the lumen for receiving a proximal end of the elongated medical device, the differences in the diameters of the first and

second portions corresponding to differences in diameter between the proximal and distal portions of the elongated medical device.

24. (Previously Presented) The protective package according to claim 21, wherein the first diameter is less than the second diameter.

25. (Previously Presented) The protective package according to claim 21, further comprising a reinforced end of a first portion of the lumen for receiving a distal end of the elongated medical device to protect the distal end of the elongated medical device.

26. (Currently Amended) A protective package for removably receiving an elongated medical device, comprising:

a protective sheath including a lumen sized to tightly fit a body of the elongated medical device to be received therein, the sheath removably protecting the elongated medical device before use, a first end of the sheath being adapted to receive a distal end of the elongated medical device and a second end of the sheath being adapted to receive a proximal end of the elongated medical device, a length of the sheath corresponding to a length of the elongated medical device and an inner diameter of the lumen being slightly greater than an outer diameter of the elongated medical device; and

a hydration port located ~~configured to receive a fluid delivery device into the lumen~~ between the first and second ends of the sheath, the hydration port opening being positioned so that a flushing fluid that may be supplied to the hydration port opening is supplied to the lumen near a middle of the sheath with a desired proportion of flow thereinto being directed toward the first and second ends of the sheath such that a first flow stream extends from the hydration port opening to the distal end of the elongated medical device and a second flow stream extends from the hydration port opening to the proximal end of the elongated medical device, wherein the hydration port includes an

adapter for connection with a source of the flushing fluid.

27. (Currently Amended) A packaging method for a catheter comprising:

providing a catheter having a distal end and a proximal end;

providing a shipping packaging in the form of a tubular enclosure having a length corresponding to a length of the catheter and an inner diameter defining a lumen that is slightly greater than an outer diameter of the catheter, a first end of the tubular enclosure being adapted to receive the distal end; a second end of the tubular enclosure being adapted to receive the proximal end of the catheter;

providing the tubular enclosure with a hydration port ~~configured to receive a fluid delivery device extending into the lumen between the first and second ends of the tubular enclosure, the hydration port opening~~ being positioned so that a desired proportion of a flow of flushing fluid that may be introduced into the lumen via the hydration port opening enters the lumen near the middle of the catheter is directed toward the first and second ends of the enclosure such that a first flow stream extends from the hydration port opening to the distal end of the catheter and a second flow stream extends from the hydration port opening to the proximal end of the catheter, wherein the hydration port includes an adapter for connection with a source of the flushing fluid; and

removably inserting the catheter into the lumen of the tubular enclosure.

28. (Currently Amended) A catheter packaging comprising:

a tubular enclosure having a first end and a second end for removably protecting a catheter having a shaped distal tip and a proximal end, the tubular enclosure having a length corresponding to a length of the catheter and an inner diameter defining a lumen

that is slightly greater than an outer diameter of the catheter; a first end of the tubular enclosure being adapted to receive the shaped distal tip distal end; a second end of the tubular enclosure being adapted to receive the proximal end of the catheter;

a hydration port ~~located configured to receive a fluid delivery device extending into the lumen between the first and second ends of the tubular enclosure, the hydration port opening~~ being positioned so that a desired proportion of a flow of a flushing fluid that may be introduced into the lumen via the hydration port opening enters the lumen near the middle of the tubular enclosure and is directed toward the first and second ends of the enclosure such that a first flow stream extends from the hydration port opening to the distal end of the catheter and a second flow stream extends from the hydration port opening to the proximal end of the catheter, wherein the hydration port includes an adapter for connection with a source of the flushing fluid; and

an additional protective structure disposed at the first end of the tubular enclosure adapted to prevent crushing of the shaped distal tip.